Applicant: Joseph A. Kwak Application No.: 10/085,187

## Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

## **Listing of Claims:**

1. (Currently Amended) A method for adjusting data modulation at a subscriber unit, comprising:

receiving data at a transmitter for transmission, wherein the received data is received in data blocks from a higher layer ARQ mechanism;

formatting the received data into packets for transmission, wherein the packets are smaller in size than the data blocks, and each packet having a forward error correction (FEC) particular type of encoding/data modulation, and wherein the packets are transmitted using an orthogonal frequency division multiple access (OFDMA) air interface;

appending an error check sequence for each packet;

transmitting the packets;

storing the packets for retransmission in a buffer memory incorporated into the transmitter;

monitoring a return channel for receipt of an acknowledgment for each packet that that packet has been received;

limiting the number of retransmissions to an operator-defined integer value;

clearing the buffer memory after the integer value is reached;

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retransmitting an original or selectively modified packet at the

transmitter, if an acknowledgment for that packet has not been received within a

predetermined period of time;

collecting retransmission statistics;

adjusting the particular encoding/data modulation of each packet using

the collected retransmission statistics; wherein if the collected retransmission

statistics indicate a low number of retransmissions, a higher capacity encoding/data

modulation scheme is selected as the particular encoding/data modulation and if the

collected retransmission statistics indicate a high number of retransmissions, a

lower capacity encoding/data modulation scheme is selected as the particular

encoding/data modulation; and

combining the retransmitted original or selectively modified packet

with the transmitted packets; and

selectively nulling subchannels from an OFDM frequency set wherein

the use of a poor quality subchannel is precluded for a predetermined period and

adding a previously nulled subchannel back into the OFDM frequency set where a

retransmission rate or retransmission rate or link quality indicates a high quality

for the previously nulled subchannel.

2-3. (Canceled).

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4. (Original) The method of claim 1 wherein the packets are transmitted using a single carrier having a frequency domain equalization (SC-FDE) air

interface.

5. (Previously presented) The method of claim 1 wherein the return

channel is a fast feedback channel when the packets are transmitted using a code

division multiple access (CDMA) air interface.

6. (Original) The method of claim 1 further comprising:

identifying a packet as having an unacceptable error rate responsive to receipt of a

negative acknowledgment.

7-9 (Canceled).

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